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Error Codes, Apple Hardware Test version 3A119

*for **MacPro***

revision 1 - 2007/4/4, sdu

NOTES *1) The "a", "b" and "cc" listed in error codes mean that any number qualifies (if it is not one mentioned before). The "xxxxx" indicates a string.*
2) The "Target Component" is the device that requires attention for the stated Error Code. Some Error Codes will provide detail on which device is concerned.

ERROR CODES

TEST ERROR CODES

Apple Hardware Test displays this information when an error is detected during testing. These error codes appear in the Test Results area at the bottom of the Hardware Test panel:

4AIR /a /b xxxxx	"**Check Connections**" procedure
4ETH /a /b xxxxx	"**Check Main Logic Board**" procedure
4MEM /a /b xxxxx	"**Check Memory**" procedure
4MLB /a /b xxxxx	"**Check Main Logic Board**" procedure
4MOT /a /b xxxxx	"**Check Connections**" procedure
4PRC /a /b xxxxx	"**Check Processor**" procedure
4SNS /a /b xxxxx	"**Check Connections**" procedure when "xxxxx" is one of TH0P, TH1P, TH2P, TH3P otherwise "**Check Main Logic Board**" procedure

ACTION PROCEDURES

WARNING: Any Action recommendation here implies that it is being done while the **Unit Under Test is powered down, disconnected from power outlet (and with no main battery installed) and that ESD precautions are followed**.

Check Connections	Target Component is:	Procedure:
4AIR /a /b c	AirPort Extreme card	a) Verify component connection and cables, retest;
4MOT /a /b xxxxx	The fan at location "xxxxx"	b) If problem persists, replace the **Target Component**
4SNS /a /b TH0P	Hard Drive Bay 1 sensor	c) If problem persists, see "**Check Main Logic Board**"
4SNS /a /b TH1P	Hard Drive Bay 2 sensor	
4SNS /a /b TH2P	Hard Drive Bay 3 sensor	
4SNS /a /b TH3P	Hard Drive Bay 4 sensor	

Check Main Logic Board	Target Component is:	Procedure:
4ETH /a /b Ethernet	Main Logic Board (Network)	a) Shutdown, power up, then retest
4MLB /a /b xxxxx	Main Logic Board	b) Reset NVRAM, then retest
4SNS /a /b xxxxx	Main Logic Board (Sensor xxxx)	c) Replace **Main Logic Board**
4VDC /a /b VideoController	Main Logic Board (Graphics)	

Check Memory	Target Component is:	Procedure:
4MEM /a /b B:x R:y	Branch "x" Rank "y"	**One or more memory module is bad.**
B:x C:y R:z	Branch "x" Channel "y" Rank "z"	These results are closely related to the actual unit under test memory configuration. Thorough procedure is beyond the scope of this document
address: xxxxx	Address xxxxx	

Check Processor	Target Component is:	Procedure:
4PRC /a /b Processor	Main Logic Board (Processor)	a) Replace **Processor**

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